JADE:
THE MINERAL EMBLEM

The first known users of jade in British Columbia were the Salish people who lived along the Fraser River in the area around the present-day town of Lillooet. For thousands of years, these people collected Fraser River jade, forming it into both useful and decorative objects.

During the Gold Rush of the 1850s, Fraser River jade came to the attention of Chinese placer miners. They collected large amounts of it from the riverbed, baffling the local gold miners, who did not see the value of the green mineral. These Chinese miners are reported to have been the first exporters of jade from Canada, hiding boulders in the coffins of dead colleagues being returned to China.

As the market for jade increased, jade prospectors began looking for the source of the jade which reappeared every year in the Fraser River. The search led up the Bridge River to Marshall Creek and the south slopes of the Shulaps Range. In this area, a number of jade lodes were found and worked.

Today, lapidary enthusiasts, "rock hounds", gather jade and other rocks and minerals from the banks and gravel bars of the Fraser River. The interest in jade was so great that in January 1968 a Crown Reserve for Jade was established along the Fraser River between Hope and Lillooet. Within the boundaries of the Crown Reserve, anyone may look for and collect jade for his or her own private use, without holding a Free Miner's Certificate. The only restriction to this privilege is that users of the Crown Reserve are asked to respect the private property and Indian Reserves which lie along the Fraser River.

At about the same time the Crown Reserve was established, jade became the mineral equivalent to the Dogwood, British Columbia's floral emblem. On April 6, 1968, jade was officially declared the mineral emblem of the Province of British Columbia.

ADDITIONAL INFORMATION

1 Jade in British Columbia
S.S. Holland: This is a reprint from the Report of the Minister of Mines and Petroleum Resources for 1961. Though now out of date, it is still of interest.

2 Jade in Canada
Stan F. Learning. Geological Survey of Canada, Paper 78-19. Government of Canada, 1978.

3 Jade
Edited by Roger Keverne. Published by Van Nostrand Reinhold, New York. This is the latest publication on the subject and covers the use and occurrences of jade world wide.

4 Information Motherlode
A booklet produced by the Geological Survey Branch of the B.C. Ministry of Energy, Mines and Petroleum Resources to assist in finding information on rocks, minerals and fossils of British Columbia.

5 The Lapidary Journal
Published monthly by Lapidary Journal, P.O. Box 80937, San Diego, CA 92138

6 Cab and Crystal
Published bimonthly by Cab and Crystal , 406-7 Elizabeth St., Mississauga, ON, L5G 2Y8

7 Mineralogy: Concepts, Descriptions, Determinations
Berry, L.G. and Mason, B., Revised by R.V. Deitrich, W.H. Freeman and Co., 1983

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British Columbia's Mineral Emblem

Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources

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What is Jade?

Jade is the general term that has been applied, somewhat confusingly to two separate semi-precious stones.

Early Spanish explorers of Mexico and Central America were surprised that the Aztecs valued a green stone more than they valued gold. The Spaniards called the stone "piedra de yjada", meaning stone of the loins, or more specifically the kidneys, due to its supposed ability to cure diseases of that organ. At about the same time, the Portuguese were trading in China and also brought back to Europe some prized green stones, which the Chinese called "Yu", meaning precious stone. It bore a close resemblance to the American product, and both became known as jade in English parlance. However, these two jades have different mineralogical compositions—the Central American jade is "jadeite", and the Chinese jade is "nephrite." The jade which is known to occur in British Columbia is nephrite. There are no known deposits of jadeite in British Columbia.

Nephrite, the more common form of jade, is an unusual variety of the mineral tremolite, a member of another common mineral family: the amphiboles. Chemically it is a calcium-magnesium-iron silicate. With increasing amounts of iron, the colour becomes dark green and may approach black. Some nephrite may contain other minerals which may produce a mottling effect called "intestinal jade" by British Columbia rock hounds. The characteristic feature of nephrite is its felt-like texture, which is the result of clusters of microscopic fibers of tremolite in random orientation. This structure also gives the stone such extreme toughness that it is nearly impossible to break off a sample with an ordinary rock hammer. Some specimens, however, may develop a foliation or layering, which allows the rock to be split.

False jades are green minerals that are passed off as jade. Serpentine is one such mineral and may be given names such as Suchow jade or bowenite. Two other "false jades" are California jade (vesuvianite) and Transvaal jade (garnet). For further technical information, please consult books on mineralogy.

Mining Jade

The mining of jade is problematic because the use of explosives can shatter it, despite its extreme toughness. Some boulders can easily be reduced in size by the use of diamond saws and hydraulic wedges. However, extracting jade from a bedrock source requires that the lode be exposed so that cutting equipment can be used. Fortunately, most jade deposits are located in contact with serpentinite, a soft, friable rock which can be removed with a bulldozer. In other places, natural fractures are present and the lode can be isolated for further reduction by diamond saws.

Most deposits contain jade of widely-varied quality. This requires on-site grading for colour, translucency, inclusions and flaws, to avoid expensive transport of lower quality jade.

British Columbia has 37 identified deposits of jade, of which nine have actually produced jade at some point in time. However, only one of these, Ogden Mountain, is still producing. Since 1961, over 4.5 million kilograms of jade, with a value of more than $18 million, have been produced in British Columbia.

Most of the jade mined in British Columbia is exported to the Orient. However, some of the mineral stays in the province, where it is put to a variety of uses. Some is processed into tiles, tabletops, counters, and similar surfaces by B.C. companies. Another portion of the jade which stays in this province is used for sculptures by B.C. artists. Still more of the province's jade is made into jewelry and small sculptures which are available across the province.

Jade Producing Areas in B.C.